

Portland State University

PDXScholar

Criminology and Criminal Justice Faculty
Publications and Presentations

Criminology and Criminal Justice

2009

Land Use Based Crime Rates: Exploring Patterns of Land Use and Crime Rates in Coquitlam and Port Coquitlam

Kathryn Wuschke

Portland State University, wuschke@pdx.edu

Follow this and additional works at: https://pdxscholar.library.pdx.edu/ccj_fac



Part of the [Criminology Commons](#), and the [Place and Environment Commons](#)

Let us know how access to this document benefits you.

Citation Details

Wuschke, Kathryn, "Land Use Based Crime Rates: Exploring Patterns of Land Use and Crime Rates in Coquitlam and Port Coquitlam" (2009). *Criminology and Criminal Justice Faculty Publications and Presentations*. 54.

https://pdxscholar.library.pdx.edu/ccj_fac/54

This Poster is brought to you for free and open access. It has been accepted for inclusion in Criminology and Criminal Justice Faculty Publications and Presentations by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

Land Use Based Crime Rates:

Exploring patterns of land use and crime rates in Coquitlam and Port Coquitlam

While it is certainly valuable to understand the counts of specific crime types by location, in order to contextualize the relationships between these features, rates are needed. Table 1 (below) further explores this relationship by calculating the rate of each crime by land use. While rates are often employed using population as a denominator, such a measure is not practical when exploring crime at the parcel level. In this case, rates have been calculated according to crimes per 100 lots, producing an understandable and comparable value across all categories of land use and crime.

Some interesting relationships emerge when comparing rates across land use. When standardized per 100 units, the Commercial land use, and the Civic, Institutional and Recreational land uses dominate the table. In 2005, Coquitlam displays 215 property crime occurrences for every 100 lots designated as Commercial. Likewise, in Port Coquitlam, there are 151 property crime occurrences for every 100 Commercial lots.

Table 1: Crime rates by land use: Coquitlam and Port Coquitlam, 2005

City	Land Uses	Parcel Counts	Crime Rate per 100 Units			
			Violent	Property	Mischief	Drugs
Coquitlam	Residential Land Use	35468	1.46	8.07	6.44	0.82
	Farm Land Use	18	0.00	0.00	5.56	0.00
	Commercial Land Use	1017	24.39	215.44	96.66	7.96
	Industrial Land Use	129	3.10	47.29	11.63	0.78
	Transportation, Communication, Utility	78	0.00	6.41	7.69	0.00
	Civic, Institutional and Recreational	559	54.56	102.15	152.59	20.04
	TOTAL	37269	2.88	15.27	11.11	1.30
Port Coquitlam	Residential Land Use	16366	1.89	11.96	8.26	0.79
	Farm Land Use	82	2.44	10.98	20.73	1.22
	Commercial Land Use	817	15.42	151.29	74.79	4.65
	Industrial Land Use	185	1.08	40.00	7.03	1.08
	Transportation, Communication, Utility	41	0.00	12.20	2.44	0.00
	Civic, Institutional and Recreational	223	28.70	87.00	132.29	21.08
	TOTAL	17714	2.85	19.62	12.92	1.23

Source: Crime data: RCMP E-Division PIRS Dataset; BCAA Land Use Dataset